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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/630,124 | 07/30/2003 | David R. Haub | CS22492US | 6704 |

20280 7590 05/03/2006

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| EXAMINER |
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TRAN, PABLO N

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| ART UNIT | PAPER NUMBER |
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2618

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/630,124

Applicant(s)

HAUB ET AL.

Examiner

Pablo N. Tran

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 19-23 is/are pending in the application.
- 4a) Of the above claim(s) 10-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 19-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-9 and 19-23 are rejected under 35 U.S.C. 102(e) as being anticipated by McCall et al. (US2004/0038656A1).

As per claims 1 and 19, McCall et al. discloses a communication device with reduced current drain, the communication device having a transmitter, a receiver, a control circuit operable to detect interference and control the receiver linearity, wherein if interference is detected the control circuit, determines a frequency offset of the interference ([003], fig. 3/310, fig. 4/no. 410, fig. 5/no. 510), measuring a power level of the interference, calculates a receiver linearity required to achieve a desired signal-to-interference ratio, and adjusts the receiver linearity to achieve the desired signal-to-interference ratio (abstract, [0003-0004], [0010-0015], [0037-0047]).

As per claim 2, McCall et al. discloses code division multiple access (CDMA) system ([0031]).

As per claim 3-4 and 20, McCall et al. discloses estimating a signal spectrum and whether interference products exceed a noise spectrum threshold within a receiver pass-band ([0010], [0034], 0039).

As per claim 5, McCall et al. discloses an attenuation factor of the receiver at the frequency offset ([0048]).

As per claims 6 and 21, McCall et al. discloses adjusting an analog-to-digital converter dynamic range to a level corresponding to the adjusted receiver linearity ([00500051], [0057], [0065-0067]).

As per claim 7, McCall et al. discloses measuring a transmit power level and frequency offset of the communication device and wherein the desired signal-to-interference ratio of the calculating step is dependent upon the transmit power level and frequency offset (abstract, [0003-0004], [0010-0015]).

As per claims 8-9 and 22, McCall et al. discloses setting at least one of the group of current and gain to the receiver at a minimum level sufficient to achieve the desired linearity and dynamic range for the desired signal-to-interference ratio ([0048], [0067]).

As per claim 23, McCall et al. suggest a third-order intercept point threshold to provide sufficient signal-to-interference ([0036]).

Response to Arguments

3. Applicant's arguments filed 02/16/06 have been fully considered but they are not persuasive.

The Applicant's stated that, "Nowhere does McCall show or suggest determining a frequency offset of the interference". In response to the Applicant, McCall disclosed distortion in a receiver may have several causes, such as interfering signals at certain frequency offsets (see McCall, [0003]) and how the distortion is measured (see McCall, fig. 3/310, fig. 4/no. 410, fig. 5/no. 510) and how the receiver linearity is adjusted based upon the measured distortions [0037-0047].

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Tran whose telephone number is (571)272-7898. The examiner normal hours are 9:30 -5:00 (Monday-Friday). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can

be reached at (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) System. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-directauspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PABLO N. TRAN
PRIMARY EXAMINER



4/26/06

April 26, 2006